

# Policy Brief Maternal Mortality in the Kyrgyz Republic

#### Introduction

Kyrgyzstan, like other UN member countries, made commitments to achieve the Millennium Development Goals, including MDG 5 "Improve Maternal Health". The results of the latest international estimate of maternal mortality (2010), carried out by the Maternal Mortality Estimation Inter-Agency Group (MMEIG), show that, during 1990 – 2010 period, the number of maternal deaths decreased by 47% globally and some countries have made significant progress in this area. However, the average annual rate of reduction in the maternal mortality ratio (MMR) after 1990 made 3.1% instead of the required 5.5%, and by 2015, MDG 5 will probably not be achieved at the global level. According to the results presented for Kyrgyzstan, estimates of maternal mortality data are higher than the official government/public statistics; the trend of MMR is unstable and has virtually no reduction (average annual rate of MMR reduction has comprised 0.2%).

#### Goal

The research is aimed at analysis of the maternal mortality trends and determinants in the KR.

#### **Objectives**

- Explore statistics (official and evaluative) on maternal mortality in the KR and investigate the reasons for the differences in maternal mortality data from various sources;
- Review national programs oriented at Mother's Health;
- Evaluate Antenatal Care delivered by health organizations at rayon and oblast levels and factors that have a negative impact on the quality of services.

# Methodology

- ✓ Desk review (analysis of the reports, evaluations, etc.);
- ✓ The research was conducted in 17 health organizations from Osh, Talas and Chui (at the oblast level – 5 organizations, at the rayon level – 6 FMCs and 6 THs);
- ✓ In total, 223 Individual Cards of pregnant women were surveyed in the sampled organizations;
- ✓ Total number of the interviewed respondents - 110 persons: 16 experts at the national level, 37 specialists at the regional level, and 57 pregnant and postpartum women.

# **Key findings**

## **Quality of data on Maternal Mortality**

The problem of completeness and quality of the current state records of deaths by cause of deaths still persists in the country, including registration and recording of maternal mortality (Table 1).

Table 1. Maternal Mortality Ratio in the KR (per 100 000 live births)

Source	1990	1995	2000	2005	2006	2008	2010
Republican Health. Inf. Center	63	67,4	46,5	61	53	58,9	50,6
NSC	62,9	44,3	45,5	60,1	55,5	55,0	51,3
WHO/EURO1	62,9	67,3	46,5	61	55,5	58,9	50,6
WHO, UNICEF and UNFPA			110				
WHO, UNICEF, UNFPA and WB, 2005				150			
WHO, UNICEF, UNFPA and WB, 2008	77	98	81	78		81	
WHO, UNICEF, UNFPA and WB, 2010	73	98	82	77			71
MICS					104		

In these circumstances, to obtain the data, which would reflect the picture in the country in a more reliable way and enable comparability of data at international level, various indirect methods of collecting data on MM are applied (MICS - «nursing method", MMEIG - method of statistical modeling using available data from different sources state/public statistics, population census data, findings and results of evaluation studies, etc.), which explains the differences in indicators from various sources. Starting from 2009, the country has consistently started implementing a number of measures to ensure improvement of the reliability of statistical data on MM in the Kyrgyz Republic. However, obstacles and barriers still exist, e.g. not a complete moratorium on punishment of health workers for MM cases registration; the situation improvement requires intensification of inter-agency cooperation; lack of monitoring of MM cases registration in non-profile departments and hospitals, which entertains the possibility of under-registration or incorrect coding of MM cases; population is not motivated to register MM cases for various reasons; in addition, low quality of postmortem (pathological anatomic) examination due to underdeveloped material and technical base and lack of qualified pathologists in the country present serious obstacles to detecting the exact causes of MM.

# Programs, aimed at maternal health improvement

Overview of health programs (National health care reforms programs, State guaranteed benefits package and programs on protection of maternal health) indicates high priority of maternal health at the state level. Shortage of financial resources in health care system, both from the state budget and international donor organizations conditioned low coverage and fragmented implementation of the planned activities, as well as lack of capital investments in health care system infrastructure for a long time.

### **Quality of PHC services**

Evaluation of quality of antenatal care was performed through the review of patient cards of pregnant women, interviews of women (parturient and postpartum) and health workers at primary health care (PHC) level. In recent years, much has been done to revise clinical practice on care during pregnancy and delivery and training of medical

personnel. The overview of pregnant women's patient cards at PHC level has shown general compliance with the main recommendations, given in the revised Clinical protocol on antenatal care: early registration of pregnant women for medical care, monitoring of arterial blood pressure, level of proteinuria and blood hemoglobin, waving interventions with unproven effectiveness, etc. (Figures1,2,3).

Figure 1. Blood Pressure measured at each visit

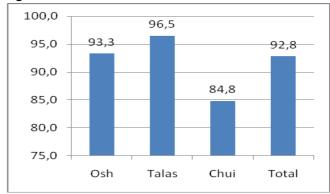


Figure 2. Number of women with different severity degrees of Anemia, by Oblasts, in %

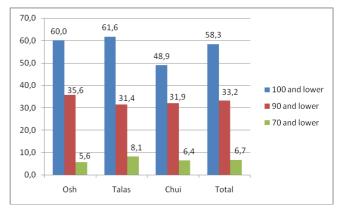
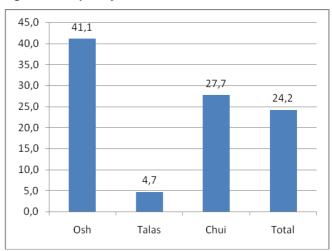


Figure 3. Frequency of Proteinuria detection, in %



The areas requiring immediate improvement include promotion of use of Gravidogram in pregnancy management, higher quality counseling and informing pregnant women on the key aspects of pregnancy and upcoming deliveries through individual consultations and "Schools of mothers", improved treatment of anemia in pregnant women, further expansion of partnership delivery and encouraging women to participate in decision-making process regarding delivery and postpartum period.

The interview of women has indicated that one of the most important factors, determining and influencing their perception of services quality is above all, professional level of medical staff. Some respondents gave critical comments on competence of health professionals at PHC level. For this reason, many of them had to seek medical services from rayon or oblast centers. Besides, despite the fact that the Government guarantees free care during pregnancy and delivery, financial barriers to health services still persist (laboratory tests and analyses, and purchase of antianemic drugs to a great extent).

The main objective of the PHC medical staff interview was to identify factors, impeding improvement of antenatal care quality. The vast majority of respondents indicated primarily socioeconomic factors (migration, low living standards, unemployment, lack of social benefits and influence of cultural peculiarities). The second group of reasons included barriers in health care system (low level of staffing of primary health care facilities, poor physical infrastructure and low competence of laboratory service staff, shortage of resources for proper functioning of "Schools of mothers," etc.).

#### **Quality of inpatient services**

To identify barriers to further improvement of quality of services for women during deliveries, health staff at the hospital level was interviewed. Denoting the significant progress that has been made in recent years in implementation of the "Effective Perinatal Care" Program, the interviewed specialists admitted that a lot still needs to be done in terms of Obstetrics and Gynecology. And, if at PHC level a significant proportion of barriers falls on the factors that lie beyond health sector (socio-economic conditions), then at hospital level, the barriers were mostly associated with more systemic reasons. Moreover, the barriers, overcoming of which requires sufficient financial investments both in infrastructure (need of

additional space, lack of equipment and its maintenance, lack of transport, equipping of Oblast centers to implement the regionalization principle), and in training of health personnel (ensuring inflow of young specialists, maintaining of continuous medical education and skills upgrading).

Thus, review of the current situation in Kyrgyzstan indicates that there are many factors that have an adverse effect on maternal health. To accelerate progress on MDG 5 "Improve Maternal health", it is necessary to develop a comprehensive and coordinated approach involving all partners and stakeholders through strengthening the intersectoral collaboration.